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October 21, 2021

VIA ELECTRONIC FILING

Ms. Jocelyn Boyd
Chief Clerk and Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: Docket No. 2021-236-G

Dear Ms. Boyd:

Pursuant to the Public Service Commission of South Carolina's letter issued in this docket on August 24, 2021, Piedmont Natural Gas Company, Inc. ("Piedmont") submits the Direct Testimony of Sarah E. Stabley and Michelle R. Mendoza.

In addition to the testimony enclosed with this filing, Piedmont is jointly sponsoring the Direct Testimony of Peter Narbaitz at ICF, which is being filed in this docket today by Dominion Energy South Carolina, Inc.

Thank you for your assistance with this matter. If you have any questions regarding this filing, you may reach me at the number shown above.

Sincerely,

/s/ T. Richmond McPherson
T. Richmond McPherson

TRM/rkg

Enclosure

cc: ORS
Bruce Barkley
Pia Powers
James H. Jeffries IV
Melinda L. McGrath

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the attached is being served this date upon all of the parties to this docket electronically or by depositing a copy of the same in the United States Mail, First Class Postage Prepaid, at the addresses contained in the official service list in this proceeding.

This the 21st day of October, 2021.

/s/ Richard K. Goley
Richard K. Goley

**Before the
Public Service Commission of South Carolina
Docket No. 2021-236-G**

**Exploration and Review of the Gas Purchasing
Policies of Piedmont Natural Gas Company,
Incorporated and Dominion Energy South
Carolina, Incorporated Pursuant to Commission
Directive Dated July 21, 2021, Issued in Docket
No. 2021-4-G**

**Testimony
of
Sarah E. Stabley**

**On Behalf Of
Piedmont Natural Gas Company, Inc.**



October 21, 2021

Q. Please state your name and your business address.

A. My name is Sarah E. Stabley. My business address is 4720 Piedmont Row Drive, Charlotte, North Carolina.

Q. By whom and in what capacity are you employed?

A. I work on behalf of Piedmont Natural Gas Company, Inc. ("Piedmont" or the "Company"), a wholly owned subsidiary of Duke Energy Corporation ("Duke Energy"), as the Managing Director of Gas Supply Optimization & Pipeline Services.

Q. Please describe your educational and professional background.

A. I graduated from Queens University of Charlotte in May of 2004 with a Bachelor of Arts Degree in Business Administration. I joined the Company as a Collector/Meter Reader in our field operations in December of 1998. In March 2001, I took a position in Gas Control as a Schedule Confirmation Analyst. In November 2004, I was hired as a Gas Supply Representative in the Gas Supply department and I was promoted to Manager of Gas Supply & Wholesale Marketing in 2008. I was promoted again in 2013 to Director of Gas Supply, Scheduling & Optimization. In 2018, I assumed the position of Managing Director of Gas Supply Optimization & Pipeline Services.

Q. Please describe the scope of your present responsibilities for the Company.

A. My current major responsibilities include supervision of the procurement and optimization of pipeline transportation, storage, and supply assets, system

1 demand forecasting, administration of the Company's approved Hedging
2 Plan, and management of broker activity for transportation customers.

3 **Q. Have you previously testified before this Commission or any other**
4 **regulatory authority?**

5 A. Yes. I have testified on numerous occasions before the Public Service
6 Commission of South Carolina and the North Carolina Utilities Commission
7 in their respective annual reviews of Piedmont's gas costs and gas purchasing
8 policies.

9 **Q. What is the purpose of your testimony in this proceeding?**

10 A. My testimony will describe the Company's gas purchasing policies and
11 practices and how Piedmont is taking steps to procure responsibly sourced
12 gas ("RSG").

13 **Q. What is RSG?**

14 A. RSG is defined as geologic natural gas with a superior environmental
15 footprint, sourced from existing natural gas supplies if the producer can meet
16 certain environmental standards. RSG is also commonly referred to by other
17 names, such as differentiated gas, certified gas, low methane emitting gas or
18 NextGenGas. Please refer to the testimony of witness Peter Narbaitz in this
19 docket for a more detailed discussion of the composition of RSG.

20 **Q. Is Piedmont taking any actions as part of its gas procurement process to**
21 **curb or minimize upstream methane emissions?**

1 A. Yes. Piedmont is actively working with our suppliers to share our
2 environmental priorities and to understand their methane emissions and
3 avoidance measures. We are driving our natural gas procurement process
4 toward suppliers with low methane emissions, while maintaining a balance
5 between responsible procurement and affordability for our customers.

6 **Q. Why is the procurement of RSG important?**

7 A. Piedmont's procurement of RSG demonstrates the Company's commitment
8 to reduce greenhouse gas emissions by acquiring and distributing gas that
9 produces minimal methane emissions. Our environmental goals are further
10 explained in the testimony of Piedmont witness Michelle Mendoza.

11 **Q. Is Piedmont a member of any organizations that are focused on**
12 **advancing the procurement of RSG as a means to reduce upstream**
13 **methane emissions?**

14 A. Yes. Piedmont has joined forces with those in the industry who are working
15 to achieve significant reductions in upstream methane emissions. For
16 example, Piedmont, through its corporate parent, Duke Energy, is a member
17 of the NextGenGas Coalition. The NextGenGas Coalition is an anti-trust
18 compliant forum for companies that believe low methane emissions gas is an
19 important part of an overall lower emissions future, and which strongly
20 encourages upstream suppliers to produce, transport and store natural gas in
21 an environmentally responsible manner. Other members include: Southern
22 Company Gas, Washington Gas, Summit Utilities, Dominion Energy and

1 DTE. We've also joined ONE Future, a coalition of natural gas companies
2 focused on finding solutions to voluntarily reduce methane emissions across
3 the natural gas supply chain – with a goal to lower emissions to less than 1%
4 by 2025.

5 **Q. What are some of the specific actions that Piedmont has taken as part of**
6 **its gas procurement process to help minimize methane emissions?**

7 A. Piedmont is working to source gas supplies from “responsible” producers,
8 meaning that the Company is contracting with suppliers who have reduced
9 their methane emissions and/or have methane emissions reductions goals.
10 The Company has included in our gas supply requests for proposals to gas
11 suppliers a process for tie breakers, where Piedmont will award a gas supply
12 contract to the supplier that offers lower methane emissions, or to the supplier
13 that has methane emission reduction goals.

14 **Q. What is “Methane Intensity” and why is it used?**

15 A. Methane intensity (“MI”) is a measure of methane emissions relative to
16 natural gas throughput. Investors, customers, environmental groups, and
17 other stakeholders are increasingly requesting information on natural gas
18 company performance based on methane emissions intensity. The Natural
19 Gas Sustainability Initiative (“NGSI”) protocol, a voluntary, industry-led
20 initiative to advance innovative efforts to address environmental, social and
21 governance (ESG) issues throughout the natural gas supply chain, establishes
22 intensity metrics for specific segments of the supply chain to respond to

1 requests for a metric that provides comparable points of reference between
2 companies. Using the NGSi protocol, companies will calculate, and report
3 methane emissions intensity based on total methane emissions associated with
4 natural gas produced, transported and delivered on the natural gas system.

5 **Q. Does Piedmont, as part of its gas procurement plan, procure RSG?**

6 A. No. Currently, Piedmont has not purchased any RSG. However, for the
7 period of April 2020 to March 2021, 35% of the Company's annual purchases
8 were from suppliers who have low emissions (based on their indication of
9 MI%) and/or have environmental and sustainability goals to reduce their
10 methane footprint. Other Piedmont suppliers may also have low methane
11 emission goals although their MI% is currently unknown to us. Notably,
12 Piedmont has not paid a premium for this low methane emitting gas.

13 **Q. What would be a reasonable estimated impact to Piedmont's purchased
14 gas cost rate compared with and without importing RSG into its system?**

15 A. Piedmont is not currently in a position to provide an estimated cost impact
16 associated with purchasing RSG. Piedmont needs a better understanding of
17 market pricing for RSG and the amount of verifiable RSG available before it
18 can determine the optimal amount of RSG to procure on behalf of its
19 customers.

1 **Q. Does the Company have any concerns regarding the procurement of**
2 **RSG?**

3 A. Yes. Piedmont is concerned about determining the right amount of RSG to
4 procure, as well as being able to confirm that the gas that is being purchased
5 is indeed RSG. As explained in more detail in the testimony of witness Peter
6 Narbaitz, there remain ambiguities surrounding the measurement and
7 confirmation of RSG, and currently there is not a common set of standards to
8 classify a substance as RSG. Further, the Company needs to better understand
9 the perspective of this Commission and other public utility commissions in
10 terms of the approval of any future incremental costs that may be associated
11 with the procurement of RSG, or other non-traditional sources of gas such as
12 landfills, wastewater treatment facilities, or farms (often referred to as
13 renewal natural gas or RNG).

14 **Q. Please explain the Company's gas purchasing policies.**

15 A. The Company has previously utilized and continues to maintain a "best cost"
16 gas purchasing policy. This policy consists of five main components: 1) the
17 price of the gas, 2) the security of the gas supply, 3) the flexibility of the gas
18 supply, 4) gas deliverability, and 5) supplier relations. As all of these
19 components are interrelated, we continue to weigh the relative importance of
20 each of these factors when developing the overall gas supply portfolio to meet
21 the needs of our customers. The Company's "best cost" gas purchasing policy

1 and each of the five components are described in more detail in the testimony
2 of Piedmont witness Todd Breece filed in Docket No. 2021-4-G.

3 **Q. Does this conclude your testimony?**

4 A. Yes.

**Before the
Public Service Commission of South Carolina
Docket No. 2021-236-G**

**Exploration and Review of the Gas Purchasing
Policies of Piedmont Natural Gas Company,
Incorporated and Dominion Energy South
Carolina, Incorporated Pursuant to Commission
Directive Dated July 21, 2021, Issued in Docket
No. 2021-4-G**

**Testimony
of
Michelle R. Mendoza**

**On Behalf Of
Piedmont Natural Gas Company, Inc.**



October 21, 2021

1 **Q. Please state your name and your business address.**

2 A. My name is Michelle R. Mendoza. My business address is 4720 Piedmont
3 Row Drive, Charlotte, North Carolina.

4 **Q. By whom and in what capacity are you employed?**

5 A. I work on behalf of Piedmont Natural Gas Company, Inc. (“Piedmont” or the
6 “Company”), a wholly-owned subsidiary of Duke Energy Corporation
7 (“Duke Energy”), as the Director of Environmental Strategy for the natural gas
8 business.

9 **Q. Please describe your educational and professional background.**

10 A. I graduated from Lorain Community College in 1981 with an Associate
11 Degree in Mechanical Engineering Technology and I graduated from High
12 Point University in 2002 with a Bachelor of Science Degree in Business
13 Administration. I joined Piedmont as a Major Account Services
14 Representative in March 1997 and I was promoted to Manager of Major
15 Account Services in 2005. In 2008, I became the Manager of Pipeline
16 Services and was promoted to Director of Pipeline Services in 2013. In 2018,
17 I became the Director of Federal Policy for natural gas in 2018. In March
18 2021, I assumed responsibilities for leading the environmental strategy for
19 Duke Energy’s natural gas business as the Director of Environmental
20 Strategy.

1 **Q. Please describe the scope of your present responsibilities for the**
2 **Company.**

3 A. I am responsible for developing and overseeing Piedmont's execution of its
4 environmental strategy in alignment with Duke Energy's overall
5 environmental goals and path to decarbonization. Key areas of focus include
6 achieving net-zero methane emissions by 2030, the use of low carbon fuels
7 such as renewable natural gas ("RNG") and responsibly sourced gas ("RSG"),
8 new technologies for monitoring and measuring methane emissions,
9 strategies for addressing upstream and downstream emissions, and innovation
10 for the future including the use of hydrogen.

11 **Q. Have you previously testified before this Commission or any other**
12 **regulatory authority?**

13 A. Yes. I have testified on numerous occasions before the Public Service
14 Commission of South Carolina and the North Carolina Utilities Commission
15 in their respective annual reviews of Piedmont's gas costs and gas purchasing
16 policies between 2014 and 2017.

17 **Q. What is the purpose of your testimony in this proceeding?**

18 A. The purpose of my testimony is to describe the Company's commitment to
19 the environment, the steps we have taken to reduce methane emissions, and
20 how the use of fuels such as RNG and RSG can help Piedmont meet its
21 methane reduction goals.

Piedmont's Environmental Commitment

Q. What are the Company's goals concerning reduced methane emissions?

A. Piedmont is committed to safe, environmentally responsible operations and developing a pathway towards a decarbonized future. The Company has committed to achieving net-zero methane emissions from our natural gas business by 2030. We recognize our responsibility to take meaningful action to reduce methane emissions in our own gas distribution system and we have pilot work underway to evaluate new technologies. As explained further by Piedmont witness Sarah Stabley, we also have a goal to achieve a methane intensity of 1% or less for our upstream methane emissions and are actively working with industry members across the natural gas supply chain to address upstream emissions to meet this goal. The Company is working with all our stakeholders to help design policies that accelerate the reduction of methane emissions while continuing to provide affordable service to our customers.

Q. What are some of Piedmont's longer-term environmental goals?

A. The Company's longer-term environmental goals include broader adoption of methane emission detection technologies across the gas infrastructure, improved methane emission reporting data to reflect actual emissions versus estimated emissions and the ability to incorporate RNG and RSG into our supply portfolio. In addition to taking measures to reduce methane emissions on our facilities, the Company believes it is important to consider upstream methane emissions.

1 **Q. What actions has the Company taken to achieve these goals?**

2 A. The Company is moving forward with the adoption of new technologies to
3 monitor and measure methane emissions. This includes a year-long pilot
4 currently underway using satellite technology to capture methane leaks in
5 coordination with on-the-ground field crews to validate, enabling faster
6 identification of leaks. Thus far, the project is yielding promising results.
7 There are also other pilot programs underway at the Company. For example,
8 the Company is preparing to test real-time monitoring and measurement
9 devices at select compressor stations, regulator stations and liquefied natural
10 gas facilities. Other efforts aimed at reducing methane emissions include the
11 deployment of cross-compression technology to eliminate the venting or
12 flaring of natural gas into the atmosphere during certain operational activities
13 and increasing leak surveys from every five years to every three years, which
14 has resulted in the Company finding and fixing methane leaks faster. Lastly,
15 we have adopted best operating practices and damage prevention initiatives
16 to reduce the unintended escape of methane when third parties damage our
17 pipeline facilities.

18 **Q. Has the Company entered into any partnerships to help achieve its**
19 **emission goals?**

20 A. Yes, the Company recently announced our partnership with two corporations
21 (Microsoft and Accenture) to develop a new technology platform designed to
22 utilize the satellite data to measure actual baseline methane emissions from

1 natural gas distribution systems. The platform will re-imagine how methane
2 emissions are calculated based on actual emissions data versus the current
3 industry standard of using calculated data from facility counts and emission
4 factors.

5 **Renewable Natural Gas**

6 **Q. What is RNG?**

7 A. RNG is a sustainable alternative fuel source created by capturing methane
8 from existing waste streams (such as landfills, wastewater treatment facilities,
9 and farms) and redirecting it away from the environment. It is a biogas-
10 derived biomethane (the gaseous product of the decomposition of organic
11 matter) that has been refined to meet natural gas quality standards and can be
12 used as a substitute for natural gas obtained from traditional sources.

13 **Q. Are there environmental benefits associated with the use of RNG?**

14 A. Yes. RNG is created when methane, that would otherwise be released into
15 the atmosphere or flared, is cleaned and used identically to traditionally
16 sourced natural gas. So, when traditional, geologic natural gas is replaced by
17 RNG, greenhouse gas (“GHG”) emissions are reduced. Thus, RNG is a
18 means to provide clean and reliable energy to our customers and is one of the
19 tools in Piedmont’s toolbox to meet our net-zero methane reduction goal by
20 2030.

1 **Q. Please explain.**

2 A. Piedmont's utilization of RNG may offset some of Piedmont's need for
3 geologic natural gasses based on RNG's "reuse" and "net-negative"
4 attributes.

5 **Q. What do you mean by RNG's "reuse" and "net-negative" attributes?**

6 A. RNG utilizes methane that will either be released into the air or flared
7 (wasted) from various waste streams such as landfills, wastewater treatment
8 facilities, or farms, and uses that gas for other purposes, such as for various
9 utility purposes. RNG's "reuse" attribute, in turn, offsets the need for
10 geologic natural gas. In many cases, the methane produced from existing
11 waste streams is greater than the methane being released from traditional
12 geologic gas, which results in a "net negative" attribute; meaning more
13 methane is being removed from the environment when RNG is used than the
14 amount of methane being released into the environment from geologic gases.

15 **Q. What steps is the Company taking to increase its use of RNG?**

16 A. Piedmont is engaged in the following activities:
17 ○ Working with developers to interconnect RNG projects to our
18 pipeline system and learning how to safely transport RNG on our
19 system;
20 ○ Developing a voluntary program where customers may elect to pay
21 a premium to fund RNG and carbon off-set purchases in order to
22 mitigate the carbon footprint of their own use of natural gas; and

- Helping facilitate the emissions reductions goals of our transportation customers by working to provide RNG to our customers at our compressed natural gas (“CNG”) fueling stations.

Q. Is RNG the same as RSG?

A. RNG and RSG are complimentary, but distinct concepts. RSG is geologic gas with a superior environmental footprint, sourced from existing supplies if producers can meet certain standards. Unlike RNG, RSG does not have potential offsetting capability.

Q. Aside from increasing its reliance on RNG and RSG, is Piedmont exploring any other ways to achieve a decarbonized future?

A. Yes. The Company is paying attention to developments in the feasibility of hydrogen, which has promising future potential as a carbon-friendly fuel, for utilization in existing natural gas infrastructure. Hydrogen pilots to test the use of hydrogen blends in natural gas pipelines, the use of hydrogen as a vehicle fuel, as well as applications on a variety of equipment are underway across the country. As successful hydrogen pilots evolve, the addition of hydrogen to the Company’s portfolio of RSG and RNG may provide progressive options towards a decarbonized future.

Q. Is there anything else you would like to express at this time?

A. Yes. Piedmont appreciates the opportunity to explore and refine our strategy to provide lower-emission gas to our customers and we look forward to continued discussions on this important topic with the Public Service

1 Commission of South Carolina, the Office of Regulatory Staff and other
2 stakeholders.

3 **Q. Does this conclude your testimony?**

4 A. Yes.